



Search Report

EIC 2800

STIC Database Tracking Number: 2800

To: LINDA SMITH
Location: JEF-9A28
Art Unit: 2862
Monday, January 12, 2009

Case Serial Number: 10/581784

From: RAJ PATEL
Location: EIC2800
JEF-4A58
Phone: (571)272-6231

raj.patel@uspto.gov

Search Notes

RE: Method of Manufacturing a Lens Driving Device having a lens barrel holder and a spacer or stopper that is removed or pulled out once the parts are fixed.

Attached are the search histories and the edited search results from the following databases:

- DIALOG – Cluster of various Engineering Databases
- STN – HCAPLUS, WPIX, JAPIO, KOREAPAT
- EAST – DERWENT, EPO, JPO, USPAT & USPGPUB

The enclosed documents include references that show lens driving devices that may include a lens barrel holder with a spacer or stopper.

Please take a look at the first few references; however I suggest that you browse through all of the enclosed references.

Please feel free to let me know if you want us to perform more searching or have any additional questions or concerns.

Best Regards,
Raj.



CASE# 10/581,784

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2	"20070116445"	US-PGPUB ; USPAT; DERWENT	OR	OFF	2009/01/08 09:48
S2	1	2005-405576.NRAN.	DERWENT	OR	OFF	2009/01/08 09:56
S3	0	(mazahiro near2 kozakai) and (hidekazu near2 yoneyama)	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:51
S4	2	(masahiro near2 kozakai) and (hidekazu near2 yoneyama)	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:52
S5	920	nidec adj sankyo	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:52
S6	920	(nidec adj sankyo).as.	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:52
S7	113	(nidec adj sankyo).as. and (driv\$4 near5 lens)	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:53
S8	67	(nidec adj sankyo).as. and (driv\$4 near5 lens) and magnet\$2	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:55

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EAST Search History

S9	85286	(lens or glass\$3 or optic\$4) near3 (driv\$4 or actu\$4 or activat\$4 or stimulat\$4 or energiz\$4 or bias\$4 or induc\$4)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/09 15:28
S10	123610	(magnet\$3 or electromagnet\$4) near3 (multiple or plural or multi or two or first or second or various or separate or differ\$4 or number)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/09 15:29
S11	74456	(stopper\$2 or spacer\$2 or abutting or regulat\$4 or connector\$2) near5 (remov\$4 or pull\$4 or detach\$4 or discard\$4 or eliminat\$4 or dislodg\$4 or displac\$4 or separate\$3 or (take near2 (out or away or off)))	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/09 15:30
S12	2	S9 and S10 and S11	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/09 15:31
S13	195642	(lens or glass\$3 or optic\$4) near3 (driv\$4 or actu\$4 or activat\$4 or stimulat\$4 or energiz\$4 or bias\$4 or induc\$4)	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:34
S14	208184	(magnet\$3 or electromagnet\$4) near3 (multiple or plural or multi or two or first or second or various or separate or differ\$4 or number)	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:35
S15	206261	(stopper\$2 or spacer\$2 or abutting or regulat\$4 or connector\$2) near5 (remov\$4 or pull\$4 or detach\$4 or discard\$4 or eliminat\$4 or dislodg\$4 or displac\$4 or separate\$3 or (take near2 (out or away or off)))	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:35
S16	697	S13 and S14 and S15	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:35
S17	0	S13 with S14 with S15	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:36
S18	677	S16 and (Manufactur\$4 or mak\$4 or produc\$4)	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:36
S19	2	S18 and (lens near2 barrel near2 holder)	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:37
S20	3	S13 same S14 same S15	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:39

EAST Search History

S21	6	{"5134334" "5225941" "5317351" "5589723" "5726521" "6392827"}. PN. OR ("7424215").URPN.	US-PGPUB ; USPAT; USOCR	OR	OFF	2009/01/09 15:40
S22	11	S13 with S14 and (lens near2 barrel near3 holder\$2)	US-PGPUB ; USPAT	OR	ON	2009/01/09 16:01
S23	57	(S13 with S14) and S15	US-PGPUB ; USPAT	OR	ON	2009/01/09 16:37
S24	0	(lens near2 driv\$4) with (lens near3 mov\$5) with (lens near2 barrel) with magnet\$4 with (spacer\$2 near3 (remov\$4 or detach\$4 or ((take or pull\$4) near2 (away or out or off))))	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/12 11:02
S25	0	(lens near2 driv\$4) and (lens near3 mov\$5) and (lens near2 barrel) and magnet\$4 and (spacer\$2 near3 (remov\$4 or detach\$4 or ((take or pull\$4) near2 (away or out or off))))	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/12 11:03
S26	5	(lens near2 driv\$4) and (lens near3 mov\$5) and (lens near2 barrel) and magnet\$4 and (spacer\$2 near3 (remov\$4 or detach\$4 or ((take or pull\$4) near2 (away or out or off))))	US-PGPUB ; USPAT	OR	ON	2009/01/12 11:03
S27	10	(lens near2 driv\$4) and (lens near3 mov\$5) and (lens near2 barrel) and magnet\$4 and ((spacer\$2 or stopper\$2) near3 (remov\$4 or detach\$4 or ((take or pull\$4) near2 (away or out or off))))	US-PGPUB ; USPAT	OR	ON	2009/01/12 11:06
S28	5	S27 not S26	US-PGPUB ; USPAT	OR	ON	2009/01/12 11:06
S29	0	(lens near2 driv\$4) and (lens near3 mov\$5) and (lens near2 barrel) and magnet\$4 and ((spacer\$2 or stopper\$2) near3 (remov\$4 or detach\$4 or ((take or pull\$4) near2 (away or out or off))))	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/12 11:10
S30	1	"20040207745"	US-PGPUB	OR	ON	2009/01/12 12:59
S31	2	"20040207745"	US-PGPUB ; DERWENT	OR	ON	2009/01/12 12:59

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d s	Items	Description
Set S1	23987	S (LENS OR OPTIC?????) (2N) (DRIV?????)
S2	0	S LENS()BARREL{}HOLDER? ?
S3	336	S LENS(2N)BARREL(2N)HOLD???
S4	4293	S (STOPPER??? OR SPACER??? OR ABUTTING()MEMBER? ? OR REGULATING()MEMBER? ?) (3N) (REMOV???? OR DETACH???? OR ((PULL??? OR TAKE???) (2N) (OUT OR AWAY OR OFF)) OR DISCARD???? OR DISLODG????)
S5	3694	S S1 AND (MAGNET??? OR ELECTROMAGNET?????)
S6	0	S S5 AND S3
S7	49	S S1 AND S3
S8	0	S S7 AND S4
S9	0	S S1 AND S4
S10	0	S S3 AND S4
S11	0	S S7 AND (STOPPER??? OR SPACER??? OR ABUTTING()MEMBER? ? OR REGULATING()MEMBER? ?)
S12	0	S S7 AND (STOPPER??? OR SPACER??? OR (ABUT???? OR REGULAT????) (2N) (MEMBER? ? OR PIECE? ? OR UNIT? ? OR ELEMENT? ?))
S13	63	S S1 AND (STOPPER??? OR SPACER??? OR (ABUT???? OR REGULAT????) (2N) (MEMBER? ? OR PIECE? ? OR UNIT? ? OR ELEMENT? ?))
S14	0	S S13 AND S3
S15	11	RD S7 (unique items)
S16	11	S S15 NOT PY>2004
S17	21	RD S13 (unique items)
S18	21	S S17 NOT S16
S19	15	S S18 NOT PY>2004
S20	0	S S5 AND S4

STN 01/12/2009

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FILE 'HCAPLUS, WPIX, JAPIO, KOREAPAT' ENTERED AT 13:43:52 ON 12 JAN 2009

L1 63588 SEA (LENS OR OPTIC#####) (2N) DRIVE####

L2 15545 SEA (STOPPER### OR SPACER### OR ABUTTING(W) MEMBER## OR
REGULATING(W) MEMBER##) (3N) (REMOV#### OR DETACH#### OR
(PULL### OR TAKE####) (2N) (OUT OR AWAY OR OFF)) OR DISCARD####
OR DISLODGE####)

L3 233 SEA LENS(W) BARREL(2N) HOLDER###

L4 181412 SEA (MAGNET#### OR ELECTROMAGNET#####) (3N) (MULTIPLE OR PLURAL
OR MULTI OR TWO OR FIRST OR SECOND OR VARIOUS OR DIFFER#### OR
NUMBER)

L5 14297076 SEA (MANUFACTUR##### OR MAK#### OR PRODUC#####)

L6 0 SEA L1 AND L2 AND L3 AND L4 AND L5

L7 30 SEA L1 AND L3

L8 0 SEA L7 AND L2

L9 1 SEA L7 AND (STOPPER### OR SPACER### OR ABUT#### (2N) MEMBER##
OR REGULAT#### (2N) MEMBER##)

L10 0 SEA L9 NOT 2005-2009/PY, PRY

L11 7 SEA L7 AND L5

L12 1 SEA L11 NOT 2005-2009/PY, PRY
D BIB KWIC

L13 9 SEA L7 AND (MAGNET##### OR ELECTROMAGNET#####)

L14 5 SEA L13 NOT L11

L15 0 SEA L14 NOT 2005-2009/PY, PRY

L16 13 SEA L1 AND L2

L17 13 SEA L16 NOT (L9 OR L11)

L18 2 SEA L17 NOT 2005-2009/PY, PRY
D BIB KWIC 1-2

L19 4 SEA L7 AND L4

L20 2 SEA L19 NOT (L9 OR L11 OR L17)

L21 0 SEA L20 NOT 2005-2009/PY, PRY

CAS/STN